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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/648,952

08/26/2003

Jamil Omar-Hatem El-Reedy

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05/18/2006

BAKER BOTTS L.L.P.

2001 ROSS AVENUE

SUITE 600

DALLAS, TX 75201-2980

EXAMINER

HUGHES, DEANDRA M

ART UNIT

PAPER NUMBER

3663

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/648,952	Applicant(s) EL-REEDY ET AL.	
	Examiner Deandra M. Hughes	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-7,9,10,12-16,19-24,26 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30 is/are allowed.
- 6) ☒ Claim(s) 1, 4-7, 9-10, 12-13, 16, 19-24, 26 is/are rejected.
- 7) ☒ Claim(s) 14,15,28 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed 4/11/06 has been entered.

Claim Objections

2. Claims 21-22 are objected to because they depend upon cancelled claim 17. In the interest of compact prosecution, claims 21-22 will be examined as if they depended upon claim 16. However, appropriate correction is required in response to this office action.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 4-5, 7, 9-10, 12-13, 16, 19-22, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomofuji (US 6,411,429 published Jun. 25, 2002) in view of Inagaki (US 2002/0060837 published May 23, 2002).

With regard to claim 16, Tomofuji discloses an optical repeater that receives an optical signal in the -30dBm to -20dBm range (col. 14, line 9). Further, the optical repeater of Tomofuji performs AGC (e.g. fig. 24, #668). Unless ASE is purposefully removed from light amplified by an EDFA, ASE is inherently present. Amplified *Spontaneous Emission* (ASE) is merely a by-product of the Amplified *Stimulated Emission* process. In fig. 24, the input light is used as a parameter in the gain calculation (#627 to #668). However, Tomofuji does not specifically disclose that the optical repeater of fig. 24 is one optical repeater in a concatenation of repeaters. It is

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well-known in the art to use a concatenation of optical repeaters in an optical transmission system, as is specifically taught by Inagaki (#108). It would have been obvious to one of ordinary skill (e.g., an optical engineer) in the art at the time the invention was made to use the optical repeater of Tomofuji as upstream and downstream amplifiers for the advantage of increasing the transmission distance of the optical transmission system.

With regard to claim 19, the setup mode is in-modes A and the operation mode is in-mode C (Tomofuji: col. 5, lines 50-60).

With regard to claims 20-21, ALC modes are disclosed by Tomofuji (col. 12, line 14).

With regard to claims 7 and 24, col. 3, line 21 of Tomofuji discloses a broadband signal for the input.

Claims 1 and 4 are merely the normal operations of the apparatus as claimed in claim 16.

Claims 10 and 12-13 and are merely the normal operation of the apparatus as claimed in claim 20-21.

With regard to claims 5, 9, 22, and 26 Tomofuji discloses an OSC (col. 41, lines 30-35),

5. Claims 6 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomofuji (US 6,411,429 published Jun. 25, 2002) in view of Inagaki (US 2002/0060837 published May 23, 2002), as applied to claims 1 and 16 above, and further in view of Flood (US 6,134,047 published Oct. 17, 2000).

Tomofuji in view of Inagaki does not specifically disclose that the stable signal comprises a signal having a power variation over time of approximately 1 dB or less. However, Flood teaches that the 1 dB variation is merely the definition of a stable or flat signal (col. 2, lines 20-30). It would have been obvious to one of ordinary skill (e.g., an optical engineer) in the art at the time the invention was made to conclude that Tomofuji was describing a signal with a 1 dB or less power variation when he was describing a flat band (col. 10, line 64) for the advantage of obtaining a consistent amplifier wavelength response.

Allowable Subject Matter

6. Claim 30 is allowed. For reasons for allowance on Claim 30, please see action dated 1/27/06 (page 8).
7. Claims 14-15 and 28-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. The following is a statement of reasons for the indication of allowable subject matter.

With regard to claims 14-15 and 28-29, the prior art does not teach or make obvious using *a shutter to block optical traffic communicating over the optical span before the optical traffic reaches the upstream amplifier* in conjunction with the other features of the claim.

Response to Arguments


9. Applicant's arguments with respect to claims 1, 4-7, 9-10, 12-13, 16, and 19-27, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deandra M. Hughes whose telephone number is 571-272-6982. The examiner can normally be reached on M-F, 8:30am-5:00pm.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Deandra M Hughes
Primary Examiner
Art Unit 3663